Application No. 10/587,248 Docket No.: 13156-00067-US1 Amendment dated June 29, 2010

After Final Office Action of March 29, 2010

AMENDMENTS TO THE CLAIMS

The following Listing of Claims replaces all previous listings of claims in the application.

Listing of Claims:

1. (Withdrawn) A process for modifying ionic liquids containing a phosphonium and/or

ammonium cation as cation and an anion selected from the group consisting of halides,

arylsulfonates, alkylsulfonates, sulfate, hydrogensulfate, alkylsulfates, hydrogencarbonate,

carbonate, triflates and carboxylates, wherein the ionic liquids are then reacted with an alkoxide

or a hydroxide in a first process step, resulting in strongly basic ionic liquids, and the strongly

basic ionic liquids are neutralized with an acid in a second process step.

2. (Withdrawn) The process according to claim 1, wherein alcohol formed in the

neutralization when alkoxides are used is removed by distillation after the neutralization carried

out in the second process step.

3. (Withdrawn) The process according to claim 1, wherein the precipitated solid is

separated off after the first process step.

4. (Withdrawn) The process according to claim 1, wherein the ionic liquid contains a

heterocyclic cation.

5. (Withdrawn) The process according to claim 4, wherein the ionic liquid contains an

imidazolium cation.

6. (Withdrawn) The process according to claim 1, wherein, in the second process step, the

strongly basic ionic liquid is neutralized with an acid to a pH corresponding to the equivalence

point of the corresponding acid-based pair.

2

Application No. 10/587,248 Amendment dated June 29, 2010 After Final Office Action of March 29, 2010

7. (Withdrawn) The process according to claim 1, wherein the reaction in the first process step takes place at a temperature from 5 to 100°C.

Docket No.: 13156-00067-US1

- 8. (Withdrawn) The process according to claim 1, wherein the reaction in the second process step takes place at a temperature of from -10 to 100°C.
- 9. (Currently amended) An ionic liquid of the general formula [Q⁺] [BR'n(OR'')m⁻] where [Q⁺] is 1,3-dimethylimidazolium, 1-ethyl-3-methylimidazolium, 1-methyl-3-propylimidazolium, 1-isopropyl-3-methylimidazolium, 1-methyl-3-pentylimidazolium, 1-hexyl-3methylimidazolium, 1-heptyl-3-methylimidazolium, 1-methyl-3-octylimidazolium, 1-decyl-3methylimidazolium, 1-methyl-3-benzylimidazolium, 1-methyl-3-(3-phenylpropyl)imidazolium, 1-(2-ethyl)hexyl-3-methylimidazolium, 1-methyl-3-nonylimidazolium, 1-methyl-3decylimidazolium, 1,2,3-trimethylimidazolium, 1-ethyl-2,3-dimethylimidazolium, or 1-butyl-2,3-dimethylimidazolium, and n = 1, 2, or 3 and m = 4 - n, where R' and R' are each selected independently from the group consisting of hydrogen, C₁-C₁₈-alkyl, being selected from the group consisting of methyl, ethyl, propyl, isopropyl, n-butyl, sec-butyl, tert-butyl, pentyl, hexyl, heptyl, octyl, 2-ethylhexyl, 2,4,4-trimethylpentyl, decyl, dodecyl, tetradecyl, hexadecyl, octadecyl, 1,1-dimethylpropyl, 1,1-dimethylbutyl, 1,1,3,3-tetramethylbutyl, benzyl, 1phenylethyl, 2-phenylethyl, α.α-dimethylbenzyl, benzhydryl, p-tolylmethyl, 1-(pbutylphenyl)ethyl, p-chlorobenzyl, 2,4-dichlorobenzyl, p-methoxybenzyl, m-ethoxybenzyl, 2cyanoethyl, 2-cyanopropyl, 2-methoxycarbonethyl, 2-ethoxycarbonylethyl, 2butoxycarbonylpropyl, 1,2-di(methoxycarbonyl)ethyl, 2-methoxyethyl, 2-ethoxyethyl, 2butoxyethyl, diethoxymethyl, diethoxyethyl, 1,3-dioxolan-2-yl, 1,3-di-oxan-2-yl, 2-methyl-1,3dioxolan-2-yl, 4-methyl-1,3-dioxolan-2-yl, 2-isopropoxyethyl, 2-butoxypropyl, 2-octyloxyethyl, chloromethyl, 2-chloroethyl, trichloromethyl, trifluoromethyl, 1,1-dimethyl-2-chloroethyl, 2methoxyisopropyl, 2-ethoxyethyl, butylthiomethyl, 2-dodecylthioethyl, 2-phenylthioethyl, 2.2,2trifluoroethyl, 2-hydroxy-ethyl, 2-hydroxypropyl, 3-hydroxypropyl, 4-hydroxybutyl, 6hydroxyhexyl, 2-aminoethyl, 2-aminopropyl, 3-aminopropyl, 4-aminobutyl, 6-aminohexyl, 2methylaminoethyl, 2-methylaminopropyl, 3-methylaminopropyl, 4-methylaminobutyl, 6methylaminohexyl, 2-dimethylaminopropyl, 3-dimethylaminopropyl, 4-

dimethylaminobutyl, 6-dimethylaminohexyl, 2-hydroxy-2,2-dimethylethyl, 2-phenoxyethyl, 2phenoxypropyl, 3-phenoxypropyl, 4-phenoxybutyl, 6-phenoxyhexyl, 2-methoxyethyl, 2methoxypropyl, 3-methoxypropyl, 4-methoxybutyl, 6-methoxyhexyl, 2-ethoxyethyl, 2ethoxypropyl, 3-ethoxypropyl, 4-ethoxybutyl or 6-ehoxyhexyl, C₆-C₁₂-aryl, being selected from the group consisting of phenyl, tolyl, xylyl, .alpha.-naphthyl, .alpha.-naphthyl, 4-diphenylyl, chlorophenyl, dichlorophenyl, trichlorophenyl, difluorophenyl, methylphenyl, dimethylphenyl, trimethylphenyl, ethylphenyl, diethyphenyl, isopropylphenyl, tert-butylphenyl, dodecylphenyl, methoxyphenyl, dimethoxyphenyl, ethoxyphenyl, hexyloxyphenyl, methylnaphthyl, isopropylnaphthyl, chloronaphthyl, ethoxynaphthyl, 2,6-dimethylphenyl, 2,4,6-trimethylphenyl, 2,6-dimethoxyphenyl, 2,6-dichlorophenyl, 4-bromophenyl, 2- or 4-nitrophenyl, 2,4- or 2,6dinitrophenyl, 4-dimethylaminophenyl, 4-acetylphenyl, methoxyethylphenyl and ethoxymethylphenyl, C₅-C₁₂-cycloalkyl, being selected from the group consisting of cyclopentyl, cyclohexyl, cyclooctyl, cyclododecyl, methylcyclopentyl, dimethylcyclopentyl, methylcyclohexyl, dimethylcyclohexyl, diethylcyclohexyl, butylcyclohexyl, methoxycyclohexyl, dimethoxycyclohexyl, diethoxycyclohexyl, butylthiocyclohexyl, chlorocyclohexyl, dichlorocyclohexyl, dichlorocyclopentyl, norbornyl, and norbornenyl, or a five- or sixmembered, oxygen-, nitrogen- and/or sulfur-containing heterocycles or two of them together form an unsaturated, saturated or aromatic ring which may be interrupted by one or more oxygen and/or sulfur atoms and/or one or more substituted or unsubstituted imino groups, where the radicals mentioned may each be substituted by functional groups, aryl, alkyl, aryloxy, alkyloxy, halogen, heteroatoms and/or heterocycles and radicals R' may be joined to one another.

Docket No.: 13156-00067-US1

- 10. (Withdrawn) The ionic liquid according to claim 9, wherein R' is phenyl and n is 3.
- 11. (Withdrawn) The ionic liquid according to claim 9, wherein the cation [Q⁺] is an N,N-dialkylimidazolium cation.
- 12. (Previously presented) A solution which comprises at least one ionic liquid according to claim 9.

Application No. 10/587,248 Amendment dated June 29, 2010 After Final Office Action of March 29, 2010

- 13. (Withdrawn) The process according to claim 2, wherein the precipitated solid is separated off after the first process step.
- 14. (Withdrawn) The process according to claim 2, wherein the ionic liquid contains a heterocyclic cation.
- 15. (Withdrawn) The process according to claim 3, wherein the ionic liquid contains a heterocyclic cation.
- 16. (Withdrawn) The process according to claim 2, wherein, in the second process step, the strongly basic ionic liquid is neutralized with an acid to a pH corresponding to the equivalence point of the corresponding acid-based pair.
- 17. (Withdrawn) The process according to claim 3, wherein, in the second process step, the strongly basic ionic liquid is neutralized with an acid to a pH corresponding to the equivalence point of the corresponding acid-based pair.
- 18. (Withdrawn) The process according to claim 4, wherein, in the second process step, the strongly basic ionic liquid is neutralized with an acid to a pH corresponding to the equivalence point of the corresponding acid-based pair.
- 19. (Withdrawn) The process according to claim 5, wherein, in the second process step, the strongly basic ionic liquid is neutralized with an acid to a pH corresponding to the equivalence point of the corresponding acid-based pair.
- 20. (Withdrawn) The process according to claim 2, wherein the reaction in the first process step takes place at a temperature from 5 to 100°C.